

when they saw that its rump and the long tail-coverts—which in this species reach far down and cover the true tail-feathers—were barred at all seasons of the year; they never dreamt of limiting the meaning of the word “tail” to the ten stiff-shafted rectrices.

We have tried to find a little fault with a few passages in this excellent book, lest Mr. Chapman should become surfeited with eulogy, which, however deserved, has a tendency to prove unwholesome; and a gentle corrective may be the more beneficial, inasmuch as he is preparing a work on the south of Spain which cannot fail to prove interesting. If he will take a little pains to condense and to chasten his style he may become a very strong writer, for there can be no more doubt of his powers of description than there is of his general accuracy.

*Sylvan Folk: Sketches of Bird- and Animal-Life in Britain.*

By JOHN WATSON. T. Fisher Unwin.

THIS little book consists of a collection of articles, many of which have, we believe, already appeared in various newspapers; and the style in which they are written is only too characteristic of the slipshod “copy” considered good enough for the reader by editors of the present day. The late Richard Jefferies possessed a certain power of picturesque description which captivated the public; and, as usual, a host of imitators have been for some time clutching at the hem of his garment in the hope of acquiring the entire mantle of his inspiration—but in vain; for an attempt at writing crisply or epigrammatically too often ends in twaddle and even in bathos.

Mr. Watson boasts of having taken all his facts at first hand from nature; speaks of “caring little for the dry bones of science, and having but scant sympathy for that species of natural history which is acquired in closets;” and adds: “We know what science—or, rather, its masters—is doing for birds now-a-days. ‘One kills them, the other writes classifying epitaphs.’” After this declamation we are not surprised at being told that “the swift is the last to come of all the swallows,” in disregard of the fact that the latter are Passeres, while the former have long been placed among Picariæ; all these insect-eaters being spoken of as “hirundines,” by which we presume the author means Hirundinidæ. Our sympathies are with Mr. Watson in his desire to prevent the indiscriminate destruction of birds and beasts of prey; but his remarks upon grouse-disease and the overstocking of moors indicate that he is unaware of the very heavy mortality among grouse in 1815, when their natural enemies were still abundant. To speak of the Little Bustard as now extinct in Britain is absurd, for it never was more than an accidental visitor, and has become much more frequent of late years. Similar ignorance is displayed respecting the Great Auk, which, according to the author, was once plentiful “among certain of its icy haunts;” while the hope held out that “further north, and within the arctic circle, there are still surf-

beaten isles where garefowl probably breed" is delusive, for there is not one authenticated instance of the occurrence of this species within—or even very close to—that line. We think it unnecessary to point out further errors.

*A Handbook of Cryptogamic Botany.* By A. W. BENNETT, M.A., B.Sc., F.L.S., and G. M. MURRAY, F.L.S. With 378 Illustrations. London and New York: Longmans, 1889. 8vo. Pp. 473.

It is now above thirty years since Berkeley's 'Introduction to Cryptogamic Botany' was published, and in that time an enormous advance has been made in added genera and species in all the orders and in our knowledge of the complicated life-histories of many of the lower types. It is remarkable that during so long a period of active work, in which the number of teachers and students has been so greatly multiplied, that no other work of a similar scope has been written in the English language. Partly, no doubt, this has arisen from the circumstance that in the teaching at our universities and medical schools Cryptogamic Botany gets pushed into a small corner, and partly because the field of study is so vast that it has now got specialized into several different departments: so that our fern-men know very little about fungi and our algologists about mosses.

Mr. Bennett has specially worked at Algæ, and in the present volume he has also undertaken the vascular orders and the Muscineæ, whilst Mr. Murray has dealt with the Fungi, including the Lichens, Mycetozoa, and Bacteria. What they have attempted is not to deal nearly so much as Berkeley did with tribes or even genera in detail, but to give a general summary of the life-history of the leading types of form, such as might be suitable for the use of teachers and advanced students. The book is copiously illustrated by woodcuts interspersed in the text, the figures being to a large extent borrowed from recent German handbooks, such as those of De Bary, Sachs, Schenck, Luerssen, and Thomé. Following the example of the last edition of Huxley and Martin's 'Elementary Biology,' they make use of a descending in preference to an ascending order as regards complication of structure. The series of orders is classified out under seven primary subdivisions as follows:—First the Vascular Cryptogamia. Here the orders are grouped under a heterosporous and isosporous series, Ophioglossaceæ being treated as a class distinct from Filices. A useful chapter, founded mainly on Solms-Laubach's recent 'Handbook of Vegetable Palæontology,' is added, upon the fossil types, which, in Equisetaceæ, Lycopodiaceæ, and Selaginellaceæ are arborescent and extremely different from anything in existence at present. The second subdivision deals with the Muscineæ, separating them into Musci and Hepaticæ. A better subdivision of the Musci would be to keep up *Archidium* alone as a distinct order, for the other genera here associated with it, *Phascum*, *Ephemerum*, and *Bruchia*, are now by all the best authorities classified with the Bryaceæ, and *Pleuridium*, as the figure given (fig. 122) shows, has the calyptra separated as a distinct cap. The